

KANSAS WATER POLLUTION CONTROL PERMIT AND  
AUTHORIZATION TO DISCHARGE UNDER  
THE NATIONAL POLLUTANT DISCHARGE  
ELIMINATION SYSTEM

Pursuant to the Provisions of Kansas Statutes Annotated 65-164 and 65-165, the Federal Water Pollution Control Act as amended, (33 U.S.C. 1251 et seq; the "Act"),

DRAFT

Owner: City of Emporia

Owner's Address: Water Treatment Plant  
2910 West 24th  
Emporia, Kansas 66801

Facility Name: Emporia Water Treatment Plant  
Wastewater Treatment Lagoons

Outfall Legal: SE¼ of Section 21, Township 19S, Range 11E of Lyon  
County, Kansas

Feature Name	Latitude	Longitude
Facility Center	38.42909	-96.21814
Outfall 001A1	38.37630	-96.19221

Receiving Stream: Cottonwood River

Basin: Neosho River Basin

is authorized to discharge from the water treatment facility described herein, in accordance with effluent limitations and monitoring requirements as set forth herein.

This permit is effective \_\_\_\_\_, supersedes the previously issued Water Pollution Control permit I-NE24-PO06, and expires \_\_\_\_\_.

FACILITY DESCRIPTION:

This is a public, lime softening water treatment plant that is designed to treat 15 MGD. Raw water from the Neosho River is treated using pre-sedimentation basins, clarifiers, an ozone unit for primary disinfection and filters before being sent to the clearwell. Water is then pumped to storage, prior to distribution. The raw water is treated using chlorine, lime, alum, fluoride, ammonia, carbon dioxide and various polymers. Sludge from the pre-sedimentation basins (5,265 gpd), clarifier basins (2,632 gpd), filter backwash (18,429 gpd), on-line monitoring and laboratory wastewater (1,152 gpd) and miscellaneous floor drains are pumped to the three cell lagoons for treatment, which are located on the south end of Emporia. Domestic wastes is sent to the city sanitary sewer. Outfall 001A1 consists of the discharge from either of the three lagoons, which is pumped to the Cottonwood River, via an underground pipeline.

\_\_\_\_\_  
Secretary, Kansas Department of Health and Environment

\_\_\_\_\_  
Date

A. EFFLUENT LIMITS AND MONITORING REQUIREMENTS

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in this permit. The effluent limits shall become effective on the dates specified herein. Such discharges shall be controlled, limited, and monitored by the permittee as specified. There shall be no discharge of floating solids or visible foam in other than trace amounts.

The initial reporting period shall begin \_\_\_\_\_ and end \_\_\_\_\_. Each consecutive month period thereafter shall constitute a reporting period. Monitoring reports shall be submitted on or before the 28th day of each month. In the event no discharge occurs, written notification is still required.

Effective Date	<u>EFFLUENT LIMITS</u>	<u>MONITORING REQUIREMENTS</u>	
	Final Limits Upon Issuance	Measurement Frequency	Sample Type
<u>Outfall 001A1 (EDMR code: EFF001A1) - Effluent at lagoon sampling structure;</u>			
Total Residual Chlorine*		Monthly	Grab
Daily Maximum - ug/l	38*		
Total Suspended Solids		Monthly	Grab
Daily Maximum - mg/l	100		
pH - Standard Units	Monitor	Monthly	Grab
Total Phosphorus - mg/l	Monitor	Monthly	Grab

\* Permittee shall conduct testing for total chlorine residual according to the methods prescribed in 40 CFR Part 136. The current acceptable quantification level for total residual chlorine in wastewater is 100 micrograms/L.

B. STANDARD CONDITIONS

In addition to the specified conditions stated herein, the permittee shall comply with the attached Standard Conditions dated December 1, 2021.

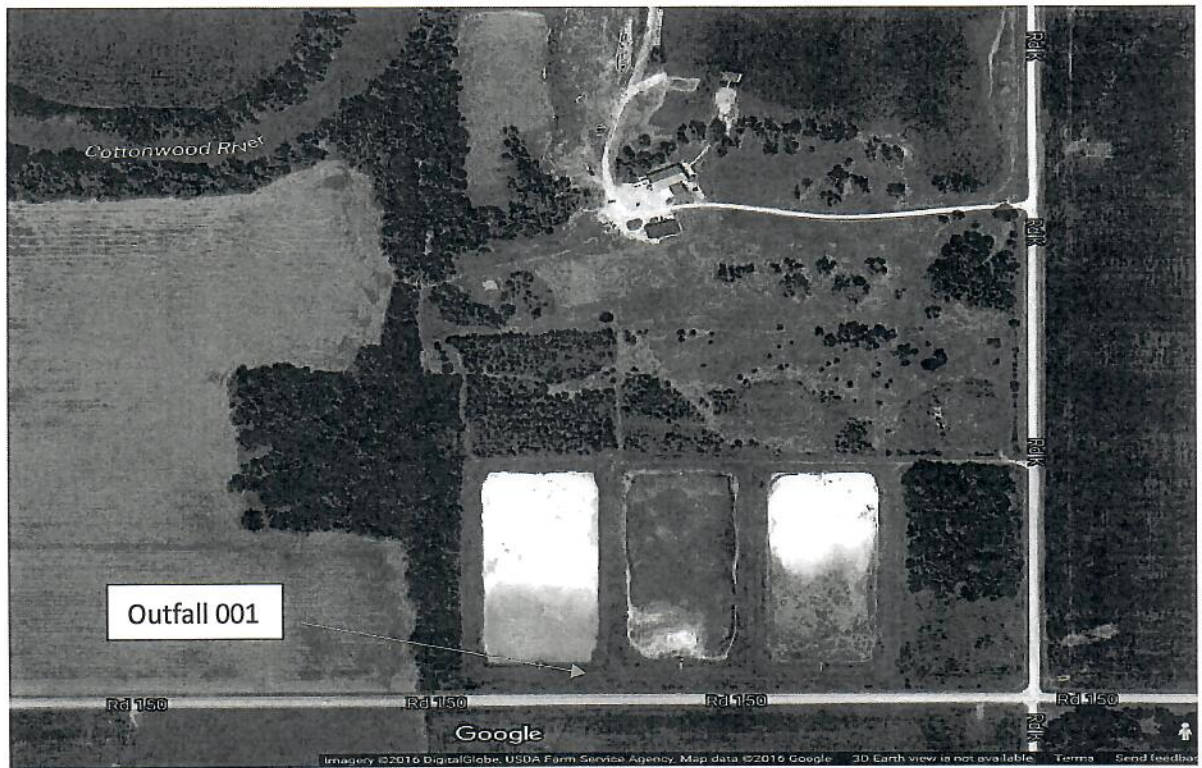
C. SCHEDULE OF COMPLIANCE

None

D. SUPPLEMENTAL CONDITIONS

EPA's National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Rule ("NPDES eRule") requires regulated entities to report data electronically. KDHE has developed electronic reporting tools to assist permittees in complying with the EPA electronic reporting rule. Unless a waiver has been approved by KDHE, permittees are required to submit information electronically. The electronic reporting system is called the **Kansas Environmental Information Management System (KEIMS)** and can be accessed at <https://keims.kdhe.ks.gov>. Upon KDHE request, associated lab reports can also be submitted in KEIMS.

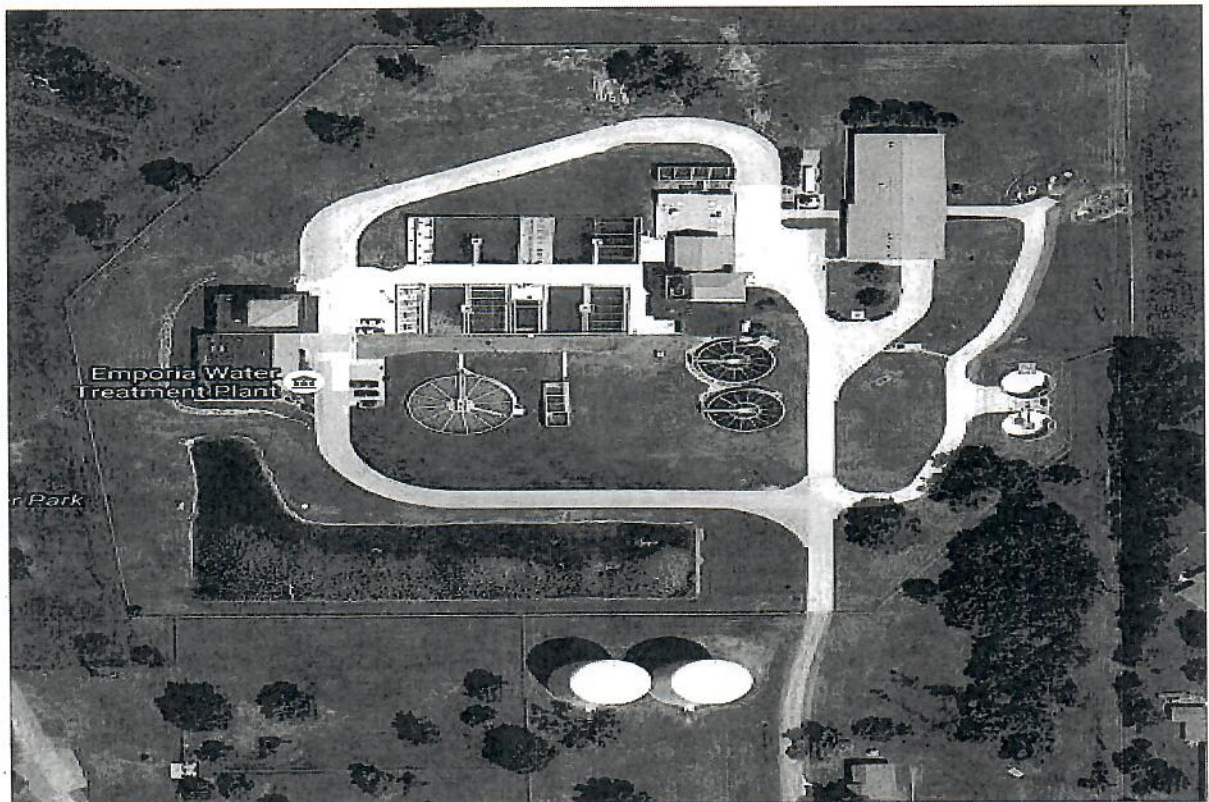




Emporia Water Treatment Plant Lagoons

Emporia Water Treatment Plant

I-NE24-P006





STANDARD CONDITIONS FOR  
KANSAS WATER POLLUTION CONTROL AND  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMITS

1. Representative Sampling and Discharge Monitoring Report Submittals:

- A. Samples and measurements taken as required herein shall be representative of the quality and quantity of the monitored discharge. Test results shall be recorded for the day the samples were taken. If sampling for a parameter was conducted across more than one calendar day, the test results may be recorded for the day sampling was started or ended. All samples shall be taken at the locations designated in this permit, and unless specified, at the outfall/monitoring location(s) before the wastewater joins or is diluted by any other water or substance.
- B. EPA's *National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Rule* ("NPDES eRule") requires regulated entities to report data electronically. KDHE has developed electronic reporting tools to assist permittees in complying with the EPA electronic reporting rule. Unless a waiver has been approved by KDHE, permittees are required to submit information electronically. The electronic reporting system is called the **Kansas Environmental Information Management System (KEIMS)** and can be accessed at <https://keims.kdhe.ks.gov>. Monitoring results shall be submitted no later than the 28th day of the month following the completed reporting period. If granted a waiver, signed and certified copies of data, information and reports, required herein, prepared in accordance with KAR 28-16-59, may be e-mailed as scanned attachments to [kdhe.bowkeims@ks.gov](mailto:kdhe.bowkeims@ks.gov), faxed to 785.559.4257, or sent by U.S. mail to:

Kansas Department of Health & Environment  
Bureau of Water-Technical Services Unit  
1000 SW Jackson Street, Suite 420  
Topeka, KS 66612-1367

2. Definitions:

- A. Unless otherwise specifically defined in this permit, the following definitions apply:
1. The "Daily Maximum" is the total discharge by weight or average concentration, measurement taken, or value calculated during a 24-hour period. The parameter, pH, is limited as a range between and including the values shown.
  2. The "Weekly Average" is the arithmetic mean of the value of test results from samples collected, measurements taken, or values calculated during four monitoring periods in each month consisting of calendar days 1-7, 8-14, 15-21 and 22 through the end of the month.
  3. The "Monthly Average", other than for E. coli bacteria, is the arithmetic mean of the value of test results from samples collected, measurements taken, or values calculated during a calendar month. The monthly average is determined by the summation of all calculated values or measured test results divided by the number of calculated values or test results reported for that parameter during the calendar month. The monthly average for E. coli bacteria is the geometric average of the value of the test results from samples collected in a calendar month. The geometric average can be calculated by using a scientific calculator to multiply all the E. coli test results together and then taking the nth root of the product where n is the number of test results. Non-detect values shall be reported using the less than symbol (<) and the minimum detection or reportable value. To calculate average values, non-detects shall be defaulted to zero (or one for geometric averages). Greater than values shall be reported using the greater than symbol (>) and the reported value. To calculate average values, the greater than reported value shall be used in the averaging calculation.
- B. A "grab sample" is an individual sample collected in less than 15 minutes. A "composite sample" is a combination of individual samples in which the volume of each individual sample is proportional to the flow, or the sample frequency is proportioned to the flow rate over the sample period, or the sample frequency is proportional to time.
- C. The terms "Director", "Division", and "Department" refer to the Director, Division of Environment, Kansas Department of Health and Environment, respectively.
- D. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of an in-plant diversion. Severe property damage does not mean economic loss caused by delays in production.
- E. "Bypass" means the intentional diversion of waste streams from any portion of the treatment facility.



3. **Schedule of Compliance:** No later than 14 calendar days following each date identified in the "Schedule of Compliance," the permittee shall submit via KEIMS at <https://keims.kdhe.ks.gov> as notified in your KEIMS Dashboard, either a report of progress or, in the case of specific action being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirements, or, if there are no more scheduled requirements, when such noncompliance will be corrected.
4. **Test Procedures:** All analyses required by this permit shall conform to the requirements of 40 CFR Part 136, unless otherwise specified, and shall be conducted in a laboratory accredited by the Department. For each measurement or sample, the permittee shall record the exact place, date, and time of measuring/sampling; the date and time of the analyses, the analytical techniques or methods used, minimum detection or reportable level, and the individual(s) who performed the measuring/sampling and analysis and, the results. If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved procedures, the results shall be included in the Discharge Monitoring Report form required in 1.B. above. Such increased frequencies shall also be indicated.
5. **Change in Discharge:** All discharges authorized herein shall be consistent with the permit requirements. The discharge of any pollutant not authorized by this permit or of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of this permit. Any anticipated facility expansions, production or flow increases, or production or wastewater treatment system modifications which result in a new, different, or increased discharge of pollutants shall be reported to the Division at least one hundred eighty (180) days before such change.
6. **Facilities Operation:** The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the requirements of this permit and Kansas and Federal law. Proper operation and maintenance also include adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the requirements of this permit. The permittee shall take all necessary steps to minimize or prevent any adverse impact to human health or the environment resulting from noncompliance with any effluent limits specified in this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge. When necessary to maintain compliance with the permit requirements, the permittee shall halt or reduce those activities under its control which generate wastewater routed to this facility.
7. **Incidents:**

"Collection System Diversion" means the diversion of wastewater from any portion of the collection system.

"In-Plant Diversion" means routing the wastewater around any treatment unit in the treatment facility through which it would normally flow.

"In-Plant Flow Through" means an incident in which the wastewater continues to be routed through the equipment even though full treatment is not being accomplished because of equipment failure for any reason.

"Spill" means any discharge of wastewater, sludge or other materials from the treatment facility other than effluent or as more specifically described by other "Incidents" terms.

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance or anticipated noncompliance with permit effluent limits because of factors beyond the reasonable control of the permittee, as described by 40 C.F.R. 122.41(n).
8. **Diversions not Exceeding Limits:** The permittee may allow any diversion to occur which does not cause effluent limits to be exceeded, but only if it also is for essential maintenance to assure efficient operation. Such diversions are not subject to the Incident Reporting requirements shown below.
9. **Prohibition of an In-Plant Diversion:** Any in-plant diversion from facilities necessary to maintain compliance with this permit is prohibited, except: (a) where the in-plant diversion was unavoidable to prevent loss of life, personal injury, or severe property damage; (b) where there were no feasible alternatives to the in-plant diversion, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime and (c) the permittee submitted a notice as required in the Incident Reporting paragraph below. The Director may approve an anticipated in-plant diversion, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above.



10. **Incident Reporting:** The permittee shall report any unanticipated collection system diversion, in-plant diversion, in-plant flow through occurrences, spill, upset, or any violation of a permitted daily maximum limit within 24 hours from the time the permittee became aware of the incident. An Incident Report shall be provided within 5 days of the time the permittee became aware of the incident. The Report shall contain a description of the noncompliance and its cause, the period of noncompliance, including exact dates and times; and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. An Incident Report may be submitted in KEIMS, see 1B above.  
  
For an anticipated incident or any planned changes or activities in the permitted facility that may result in noncompliance with the permit requirements, the permittee shall submit written notice, if possible, at least ten days before the date of the event. For other noncompliance, the above information shall be provided with the next Discharge Monitoring Report.
11. **Removed Substances:** Solids, sludges, filter backwash, or other pollutants removed in the course of treatment of water shall be utilized or disposed of in a manner acceptable to the Division.
12. **Power Failures:** The permittee shall provide an alternative power source sufficient to operate the wastewater control facilities or otherwise control pollution and all discharges upon the loss of the primary source of power to the wastewater control facilities.
13. **Right of Entry:** The permittee shall allow authorized representatives of the Division of Environment or the Environmental Protection Agency upon the presentation of credentials, to enter upon the permittee's premises where an effluent source is located, or in which are located any records required by this permit, and at reasonable times, to have access to and copy any records required by this permit, to inspect any facilities, monitoring equipment or monitoring method required in this permit, and to sample any influents to, discharges from or materials in the wastewater facilities.
14. **Transfer of Ownership:** The permittee shall notify the succeeding owner or controlling person of the existence of this permit by certified letter, a copy of which shall be forwarded to the Division. The succeeding owner shall secure a new permit. This permit is not transferable to any person except after notice and approval by the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary.
15. **Records Retention:** Unless otherwise specified, all records and information resulting from the monitoring activities required by this permit, including all records of analyses and calibration and maintenance of instruments and recordings from continuous monitoring instruments, shall be retained for a minimum of 3 years, or longer if requested by the Division. Biosolids/sludge records and information are required to be kept for a minimum of 5 years, or longer if requested by the Division. Groundwater monitoring data, including background samples results, shall be kept for the life of the facility regardless of ownership.
16. **Availability of Records:** Except for data determined to be confidential under 33 USC Section 1318, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. Effluent data shall not be considered confidential. Knowingly making any false statement on any such report or tampering with equipment to falsify data may result in the imposition of criminal penalties as provided for in 33 USC Section 1319 and KSA 65-170c.
17. **Permit Modifications and Terminations:** As provided by KAR 28-16-62, after notice and opportunity for a hearing, this permit may be modified, suspended or revoked or terminated in whole or in part during its term for cause as provided, but not limited to those set forth in KAR 28-16-62 and KAR 28-16-28b through g. The permittee shall furnish to the Director, within a reasonable amount of time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish upon request, copies of all records required to be kept by this permit. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
18. **Toxic Pollutants:** Notwithstanding paragraph 17 above, if a toxic effluent standard or prohibition (including any schedule of compliance specified at such effluent standards) is established under 33 USC Section 1317(a) for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be revised or modified in accordance with the toxic effluent standard or prohibition. Nothing in this permit relieves the permittee from complying with federal toxic effluent standards as promulgated pursuant to 33 USC Section 1317.
19. **Administrative, Civil and Criminal Liability:** The permittee shall comply with all requirements of this permit. Except as authorized in paragraph 9 above, nothing in this permit shall be construed to relieve the permittee from administrative, civil or criminal penalties for noncompliance as provided for in KSA 65-161 et seq., and 33 USC Section 1319.



20. Oil and Hazardous Substance Liability: Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject to under 33 USC Section 1321 or KSA 65-164 et seq. A municipal permittee shall promptly notify the Division by telephone upon discovering crude oil or any petroleum derivative in its sewer system or wastewater treatment facilities.
21. Industrial Users: A municipal permittee shall require any industrial user of the treatment works to comply with 33 USC Section 1317, 1318 and any industrial user of storm sewers to comply with 33 USC Section 1308.
22. Property Rights: The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights nor any infringements of or violation of federal, state or local laws or regulations.
23. Operator Certification: The permittee shall, if required, ensure the wastewater facilities are under the supervision of an operator certified by the Department. If the permittee does not have a certified operator or loses its certified operator, appropriate steps shall be taken to obtain a certified operator as required by KAR 28-16-30 et seq.
24. Severability: The provisions of this permit are severable. If any provision of this permit or any circumstance is held invalid, the application of such provision to other circumstances and the remainder of the permit shall not be affected thereby.
25. Removal from Service: The permittee shall inform the Division at least three months before a pumping station, treatment unit, or any other part of the treatment facility permitted by this permit is to be removed from service and shall make arrangements acceptable to the Division to decommission the facility or part of the facility being removed from service such that the public health and waters of the state are protected.
26. Duty to Reapply: A permit holder wishing to continue any activity regulated by this permit after the expiration date, must apply for a new permit at least 180 days prior to expiration of the permit.
27. Publicly owned treatment works (POTWs): All POTWs shall provide adequate notice to the Director of the following per 40 CFR 122.42(b):
  - A. Any new introduction of pollutants into the POTW from a non-domestic source which would be subject to section 301 or 306 of the CWA ; and
  - B. Any substantial change in the volume or character of pollutants being introduced into a POTW by a non-domestic source.
  - C. For purposes of this paragraph, adequate notice shall mean within 30 days of the POTW being aware of the introduction of pollutants and shall include information on the quality and quantity of influent introduced into the POTW, and any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.
28. POTW regulated pretreatment program requirements: For POTWs with an approved pretreatment program, the POTW shall:
  - A. Identify, in terms of character and volume of pollutants, any Significant Industrial Users discharging into the POTW subject to Pretreatment Standards under section 307(b) of CWA and 40 CFR part 403.
  - B. Provide to KDHE and EPA a written technical evaluation of the need to develop new local limits or revise existing local limits under 40 CFR 403.5(c)(1).
29. This permit may be reopened and modified if KDHE and/or EPA determines the permittee shall develop and approved pretreatment program that complies with 40 CFR, Part 403.



**KDHE  
NPDES PERMIT  
STATEMENT OF BASIS**

Prepared by:	Steve Caspers	Kansas Permit No.:	I-NE24-PO06
Date:	November 14, 2022	Federal Permit No.:	KS0099244
Facility Name:	Emporia Water Treatment Plant	City:	Emporia
Legal Description:	SE 1/4 of Sec 21, T19S, R11E	State:	Kansas
County:	Lyon	Zip Code:	66801

Proposed

The proposed action consists of re-issuing the above referenced NPDES permit. The primary change was the TRC limit was reduced, after the city provided more accurate flow readings of discharges from the water plant.

Certification Statement

The requirements of this permit are pursuant to the Surface Water Quality Standards K.A.R. 28-16-28 and appropriate Federal regulations.

Facility Description

This is a public, lime softening water treatment plant that is designed to treat 15 MGD. Raw water from the Neosho River is treated using pre-sedimentation basins, clarifiers, an ozone unit for primary disinfection and filters before being sent to the Clearwell. Water is then pumped to storage, prior to distribution. The raw water is treated using chlorine, lime, alum, fluoride, ammonia, carbon dioxide and various polymers. Discharges from the primary and secondary clarifiers (86,234 gpd) and filter backwash (142,376 gpd) and miscellaneous floor drains are pumped to the three cell lagoons for treatment, which are located on the south end of Emporia. Domestic wastes are sent to the city sanitary sewer. Outfall 001A consists of the discharge from either of the three lagoons, which is pumped to the Cottonwood River, via an underground pipeline.

Receiving Stream

Outfall 001A discharges to the Cottonwood River. The Cottonwood River is a classified water body, pursuant to K.A.R. 28-16-28 and is designated for special aquatic life support, public water supply, irrigation, livestock watering, domestic and industrial supply, food procurement, groundwater recharge and primary contact recreation, by default.

The Cottonwood River is not listed on the 303(d) list but a TMDL has been written for this stream segment (HUC:11070203) for total phosphorus.

Proposed Effluent Limitations - Outfall 001A:

Total Residual Chlorine: A daily maximum limit of 38 ug/l was determined based on water quality calculations. Since the expected quantification limit is 100 ug/l, test results in excess of this quantification level will be considered violations of the permit limit. TRC will need to be *monitored* on a *monthly* basis.

Total Suspended Solids (TSS): The permittee will be required continue to *monitor* TSS on a *monthly* basis and meet a technology/Best Professional Judgment based permit limit of 100 mg/l.

pH: Limits of 6.0 – 9.0 were removed from the permit during the last permit cycle, so pH will need to be *monitored* on a *quarterly* basis, as before. The limitation was removed before based on the results of a mixing test completed by the city. (Attached)

Phosphorus: While this facility is not expected to be a significant source of phosphorus, they will need to continue to monitor for this pollutant, so more data can be obtained, since there is a TMDL for this pollutant.